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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/804,991

03/18/2004

Sang-Duk Lee

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32605 7590 07/13/2007
MACPHERSON KWOK CHEN & HEID LLP
2033 GATEWAY PLACE
SUITE 400
SAN JOSE, CA 95110

EXAMINER

NGUYEN, DUNG T

ART UNIT

PAPER NUMBER

2871

MAIL DATE

DELIVERY MODE

07/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/804,991

Applicant(s)

LEE ET AL.

Examiner

Dung Nguyen

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2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/25/2007 has been entered.
2. Applicant's amendment dated 04/25/2007 has been received and entered. Claims 1-18 are remain pending in the application.

Claim Objections

3. Claims 1 and 11 objected to because of the following informalities: the limitation of "receiving space", according to the specification, should be corrected as --insertion space--.
- Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 6, 9-11, 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (APA), figure 3, in view of Park et al., US Patent 6,587,355.

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Regarding the above claims, APA, figure 3, discloses a liquid crystal display (LCD) apparatus comprising:

- . an LCD panel (300);
- . a driver printed circuit board (PCB 310);
- . a backlight assembly (320);
- . a received container (part between backlight 320 and PCB 310);
- . a digitizer (330).

APA, figure 3, however, does not disclose first and second protrusion forming on a back side of the received container. Park et al. does disclose a first protrusion (part between frame 82 and PCB 4) can be protruded from a received container (frame structure 82)(see figure 4A) to form an insertion part (e.g., space between PCB 4 and frame 82) and support the driver PCB. It should also be noted that a second protrusion is not shown in figure 4a; however, such second protrusion would inherently formed from the opposing side in order to support the driver PCB (4). Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to employ the APA's container having protrusions with receiving parts as shown by Park et al. for supporting the driver PCB.

3. Claims 2-5, 7-8, 12-14 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (APA), figure 3, in view of Park et al., US Patent 6,587,355, further in view of Won, US Patent 6,046,785.

Regarding the above claims, the modification to APA disclose the claimed invention as described above except for first and second connection portions forming on a back side of the received container as well as the driver PCB including third and fourth connection portions

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corresponding to the first and second connection portions. Won does disclose protrusions can be formed form a mold frame structure (19)(see figure 1 and 2A) and forming connection portions corresponding to PCB connection portion (30) and connected together through a screw/screw hole (through hole over PCB 30). Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to employ the APA's container having protrusions for forming connection portions to support the driver PCB through the PCD connection portions as shown by Won in order to stably ground the PCB.

Response to Arguments

4. Applicant's arguments filed 04/25/2007 have been fully considered but they are not persuasive.

Applicant's arguments are that Park neither discloses "the PCB (4) is not spaced apart from the plastic frame (82)" nor "the received space does not extend from the first protrusion and the second protrusion (because of the plate 3)". The Examiner respectfully disagrees with Applicant's viewpoint. In particular, as asserted by the Applicant, the frame (8) is separated from the PCB (4) by a plate (3). In other words, the PCB (4) is spaced apart from the frame (8) (by a plate 3). In addition, because of the plate (3), an insertion space (claimed as receiving space) would be formed therebetween. Furthermore, as stated above, although the second protrusion is not shown in figure 4a, such protrusion would be inherently formed over the other side to support the PCB (4); so as the insertion space would extend from the first protrusion portion to the second protrusion as well.

Accordingly, the rejection of the above claims stand.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Nguyen whose telephone number is 571-272-2297. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DN
07/07/2007

/Dung Nguyen/
Dung Nguyen
Primary Examiner
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